NOTES ON SOME TEXAS CURCULIONIDAE WITH A DESCRIPTION OF A NEW SPECIES

By Horace R. Burke^{1, 2}

The 1 new species herein described was collected during a current survey of the weevil fauna of Texas. Notes of interest on other species encountered in the State are also included.

Onychylis texanus new species

Oblong-ovate, reddish brown; densely clothed with agglutinated, grayish brown scales; darker scales forming patterns on pronotum and elytra; alternate intervals of elytra each with a row of narrow, decumbent setae.

Holotype male: Body length, 3.7 mm (from anterior margin of eyes to tip of elytra); body width, 1.7 mm (across widest portion of elytra); rostrum length, 1.3 mm (along straight line from lower anterior margin of eye to tip of rostrum); pronotum length, 1.0 mm (along midline); pronotum width, 1.2 mm (across widest portion).

Rostrum longer than pronotum, moderately and evenly curved, slightly expanded at antennal insertions, then widening gradually to apex; basal two-thirds clothed with shining scales which obscure punctation; apex shining, finely and remotely punctured beyond antennal insertions. Mandibles piceous. Suprascrobes narrow, deep, widening at posterior extremities, opening against upper two-thirds of eyes. Antennae (fig. 7) light reddish brown, inserted slightly less than two-thirds distance from base of rostrum; scape slender on basal three-fourths, distinctly enlarged at apex, not attaining eye; funicle six-segmented; first segment elongate, clavate; second narrower, subequal to first, almost as long as next three combined; third, fourth and fifth segments a little longer than wide; sixth not closely joined to club. Club elongate oval, twice as long as wide, rather densely pubescent, with scattered long setae.

Head with a slight transverse impression above eyes; large punctures on frons covered with scales; a few scattered recurved setae on frons adjacent to upper anterior margins of eyes. Eyes oval.

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²I am indebted to Mr. R. T. Thompson, British Museum (Natural History), for the loan of type material for comparison, and to Dr. Vasco M. Tanner, Brigham Young University, for information on material in his collection.

Prothorax wider than long, sides subparallel on basal two-thirds, then feebly converging to apical constriction; apex moderately constricted. Pronotum coarsely, densely punctate, depressed before apex; disk with three dark longitudinal vittae, two lateral ones narrow, middle one broader and somewhat diamond-shaped.

Elytra wider than prothorax, transversely impressed on disk before middle; sides almost parallel, slightly wider at middle, thence converging to rounded apex. Humeri oblique, rounded, subangulate behind. Intervals subequal in width; alternate ones slightly more convex, each bearing a row of pale, narrow, decumbent setae which are longer and more prominent on the declivity; basal extremities of second and fourth intervals darker for a short distance; first to fifth intervals elevated at base. Striae wide, shallow, but well defined; strial punctures covered with scales. V-shaped pattern of dark scales on disk of elytra originating on suture at beginning of declivity, from which point a narrow arm extends obliquely forward across first four intervals of each elytron. Scales on declivity infuscated.

Ventral side of body, except third, fourth and fifth abdominal sterna, clothed with scales similar to those on dorsal surface. First and second abdominal sterna with rather large, uniformly placed punctures; first deeply impressed at middle. Third, fourth and fifth sterna finely punctate; clothed with scattered suberect setae and small, rounded grayish white scales which become rather elongate along lateral edges of segment. Last sternum with slight impression in middle at apex and a tuft of setae projecting from posterior margin on each side of impression.

Legs long; femora and tibiae with scattered recurved setae. Tibiae each with a prominent apical spine; long, suberect setae and row of small, acutely pointed denticles along inner margin; scales on inner side of tibiae grayish white, rounded, with feathery margins. Fore and middle tibiae feebly curved at apex; hind tibiae straight. Tarsi four-segmented, third segment deeply bilobed, nearly twice as wide as second, fourth equal in length to third, bearing a pair of slender, slightly divergent claws.

Allotype female: Body length, 3.7 mm.; body width, 1.7 mm.; rostrum length, 1.4 mm.; pronotum length, 1.0 mm.; pronotum width, 1.2 mm.

Resembles male, except that the first abdominal sternum is convex and the impression on the last segment is deeper and more distinctly defined.

Type material: Holotype male and allotype female, Anderson Co., Texas, VIII-31-1958 (H. R. Burke), in Collection of Department of Entomology, A. & M. College of Texas. Eleven paratypes (5 males, 6 females) same data as holotype and allotype, and one additional female

paratype, Walker Co., Texas, IV-26-1957 (M. J. Lukefahr), to be deposited as follows: 1 female, 1 male, United States National Museum; 1 female, 1 male, British Museum (Natural History); 1 female, 1 male, V. M. Tanner, Brigham Young University; 2 females, A. & M. College of Texas; and 2 males, 2 females, author's collection.

The type series from Anderson County was collected while sweeping vegetation around a small pond. The specimen collected by M. J. Lukefahr in Walker County was taken while sweeping in a roadside ditch.

There is little variation in the paratype series, except in size. Seven paratype females range from 3.3 to 4.4 mm. (Av. 3.9) in body length. The body length of five paratype males ranges from 3.3 to 3.7 mm. (Av. 3.5).

Aedeagus with aedeagal apodemes and endophallus of male paratype illustrated in figures 6a, 6b and 6c.

Spermatheca of female paratype, and eighth sternum of same, illus-

trated in figures 3 and 5, respectively.

This is the largest known species of Onychylis. It is most closely related to Onychylis setiger Champion (Biol. Cent. Amer., Col., Vol. 4, Pt. 3:134) from Mexico, from which it differs by the larger size, the rostrum being longer in comparison with the length of the pronotum, the sides of the prothorax being more nearly parallel (figs. 1, 2), and the elytral striae being wider and shallower. Differences are also evident in the spermathecae of the two species (figs. 3, 4). Onychylis texanus was compared with a female cotype specimen of O. setiger Champion, which was made available by loan from the British Museum (Natural History). Both species have a row of spines on the inner side of each tibia, and both have the first and second segments of the funicle elongated. Onychylis texanus traces to O. alternans Lec. in Tanner's key to species occurring in America north of Mexico (Great Basin Nat. 4(1-2):7). However, O. texanus may be easily distinguished from O. alternans by having the more elongate first funicular segment and a row of spines on the inner side of each tibia.

ADDITIONAL NOTES ON OTHER SPECIES

Auletobius cassandrae (Lec.)—A single example of this species was collected VIII-16-1958, Montgomery Co., while beating underbrush in the edge of a thickly wooded area. This weevil is listed in the Leng Catalogue from Georgia and Florida, and has not previously been reported from Texas. Another species, Auletobius ater (Lec.), also occurs in the State.

Apion disparatum Sharp—Adults were collected in large numbers at College Station, June and July 1958, on Petalostemum multiflorum Nutt.,

growing along the edge of a pond. The larvae develop in the flower heads of this plant.

Isodacrys ovipennis Schffr.—Abundant in Central and South Texas during March, April and May. Numerous specimens have been swept from low vegetation in open fields near College Station during March and April. Examples were examined from Gonzales Co., April 1955, where they were reported doing considerable damage to the foliage of young watermelons and peas.

Aphrastus unicolor Horn—Common in South Texas. Members of the species were found defoliating young watermelons and cowpeas in Wilson and Karnes Cos., May 1955. Crop damage by this and the preceding species has not been reported before or since the 1955 growing season. Since 1955 was a particularly severe drouth year, it is possible that these two weevils moved from their natural host plants, which perhaps were suffering from lack of moisture, into the irrigated and succulent watermelon and pea fields.

Achrastenus griseus Horn—Common in East and Central Texas. It is known to feed on the foliage of roses, pear, peach, plum, grape and pecan. It frequently damages pecan, peach and plum trees by destroying the young buds. A recent case was reported where this weevil damaged young tomato plants.

Endalus laticollis Blatcheley—A large series of this weevil was taken while sweeping vegetation along the edge of a pond in Anderson Co., VIII-31-1958. Additional specimens were collected at College Station. This species has previously been reported only from Florida.

Numerous examples of *Brachybamus electus* Germ., *Onychylis longulus* Lec. and a single *Lixellus filiformis* Lec. have been collected on vegetation around the edges of ponds in Central Texas. The latter species apparently is not at all common in this area.

Amercedes sublirostis Csy.—This weevil occurs abundantly on Xanthoxylum clava-herculis L. in Brazos Co. during April and May. Adults have been observed feeding on the fruit of this tree, but an extended search has failed to reveal the immature stages. Pierce (Proc. Wash. Ent. Soc. 13:60) lists Zygobaris xanthoxyli Pierce as breeding in the seeds of X. clava-herculis in Victoria Co.

Stethobaris cicatricosa Csy.—Several adults emerged at College Station, May 1957, from cotton gin trash which had been collected at Brownsville. These weevils had likely entered the trash the preceding fall at Brownsville. From collection records it appears that the species is confined to the extreme southern portion of the State.

Centrinapsis perscitus Hbst.—This weevil may be collected at College

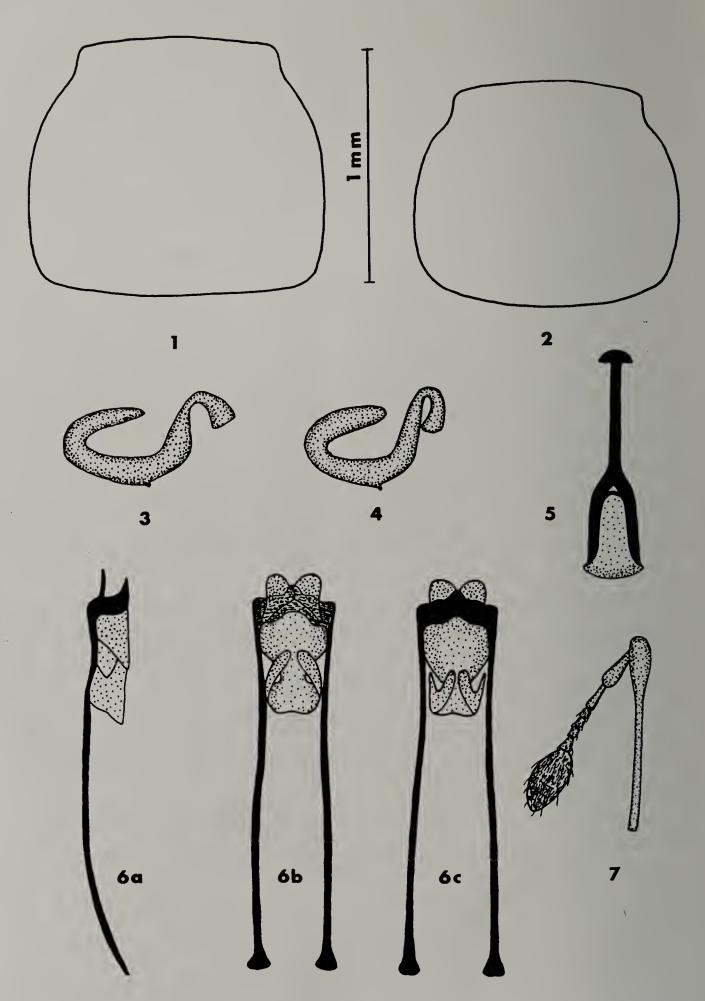


FIGURE 1. Outline of prothorax of female Onychylis texanus n. sp. FIGURE 2. Same of female O. setiger Champion. FIGURE 3. Spermatheca of O. texanus n. sp. FIGURE 4. Same of O. setiger Champion. FIGURE 5. Dorsal view of eighth sternum of female O. texanus n. sp. FIGURE 6a. Lateral view of aedeagus and aedeagal apodemes of male O. texanus n. sp. FIGURE 6b. Dorsal view of same. FIGURE 6c. Ventral view of same. FIGURE 7. Antenna of O. texanus n. sp.

Station from June through September. Several examples were taken on *Portulaca oleracea* L., VI-16-1923 (H. J. Reinhard). Other specimens were collected recently on the sides of screen cages in fields where this plant was abundant.

Tyloderma baridia Lec.—Adults are extremely abundant on the ground beneath Oenothera laciniata Hill, during the spring months. The larvae feed on the roots of this plant. Adults, sometimes in large numbers, often invade houses during late fall.

ADDITIONAL RECORDS OF CISSITES (Meloidae)

The recent summary of distributional records of *Cissites* published by Enns (1958, Coleopterists' Bull., vol. 12, pp. 61-64) prompted me to review the records of the genus that I have accumulated during the past few years, and I take this opportunity to add them to Dr. Enns' lists of localities. I wish to thank the collectors and the curators of the various institutional collections mentioned below for making this material available to me.

Cissites auriculata (Champion). Most of the localities from which auriculata has been recorded lie within the tropical zone of México and Central America, although previously published records from the southern end of the Mexican Plateau (Guadalajara, Jalisco, and Tehuacán, Puebla) demonstrate that the species is also able to withstand temperate conditions. In addition, I have records of two females from the northern part of the plateau, in Nuevo Leon: one from El Diente, October 1957, H. Ramírez; and the other labeled Monterrey, April 28, 1954. Both specimens are in the collection of the Instituto Tecnologico y de Estudios Superiores de Monterrey. Mr. Jean Mathieu, a member of the staff of the Instituto, tells me that El Diente is a large toothlike boulder 4 miles southwest of Monterrey that has become a familiar landmark. He describes the vegetation at El Diente, which lies in a canyon, as considerably more mesic than usual for the Monterrey region. The records from Nuevo Leon extend the known range of auriculata in eastern México some 475 miles northward (from Almolonga, Veracruz). Other Mexican records are represented by single specimens from: Jalastoc, Morelos, November 30, 1957, F. Mendoza; Mesa de San Diego, Puebla, April 10, 1953, Riess; Cotaxtla, Veracruz, April 10, 1956, Ortega; Tehuantepec, Oaxaca, July 12, 1955, P. & C. Vaurie; Río Papagayo, Guerrero, January 5, 1948, S. & D. Mulaik; and Tuxtla Gutiérrez, Chiapas, August 20, 1952, M. Alvarez del Toro. The specimens from Morelos, Puebla, and Veracruz are in the collection of the Rockefeller Foundation Agricultural Program in México, at Chapingo, México; the specimen from Oaxaca is in the American Museum of Natural History; and the rest are in my collection.

Cissites maculata (Swederus). There is little to add to Enns' account of the distribution of this species except to point out that in the West Indies there are published records for the islands of Puerto Rico and Dominica (see Selander and Bouseman, Proc. U. S. Nat. Mus., in press, for a summary of all West Indian records). Records of specimens of maculata in my collection are as follows: Ascushinga, Córdoba, Argentina, January 1953, J. Foerster, 2; Nova Teutonia, Santa Catarina, Brasil, December 17 and 20, 1955, F. Plaumann, 2; Obados, Pará, Brasil, 1; Hacienda María Sancuratambo, 3000 ft., Cosnipata Valley, Cusco, Perú, February 27, 1952, tropical jungle, F. Woytkowski, 1.—Richard B. Selander, University of Illinois, Urbana.